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FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. 10/099,876 03/15/2002 Norbert Brill 6655 5393 EXAMINER 03/30/2004 7590 VERSTEEG, STEVEN H Samuels, Gauthier & Stevens LLP **Suite 3300** ART UNIT PAPER NUMBER 225 Franklin Street Boston, MA 02110 1753

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/099,876	BRILL ET AL.
Office Action Summary	Examiner	Art Unit
	Steven H VerSteeg	1753
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 18 June 2002.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) ☐ Claim(s) 1-28 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-28 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9)⊠ The specification is objected to by the Examiner.		
10)⊠ The drawing(s) filed on <u>15 March 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 6/18/02.</li> </ol>	<b></b>	Patent Application (PTO-152)

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 10 depends from itself and is therefore indefinite. Claim 9 depends from claim 10 and contains all of the limitations of claim 10. Therefore claim 9 is rejected for the same reasons as claim 10.

# Specification

4. The disclosure is objected to because of the following informalities: "is" should be "of" on page 2 at line 11; and it is unclear what "NE" means on page 5 at line 7.

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 15-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,081,710 to Heywood et al. (Heywood).

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- 7. For claim 15, Applicant requires an electrode comprising a superalloy having a cobalt content greater than 8%. For claim 16, Applicant requires cobalt and nickel of at least 12 weight %. For claim 17 Applicant requires tungsten of 0.1-15 weight %. For claim 18, Applicant requires titanium in an amount of 0.1-5% by weight.
- 8. Heywood discloses an electrode comprising superalloy (col. 2, 1. 7-16), 40 weight % cobalt, 25 weight% nickel, and 2 weight percent titanium (col. 3, 1. 12-30). Heywood also discloses an electrode comprising superalloy (col. 2, 1. 7-16), 10 weight percent cobalt and 12 weight percent tungsten (col. 2, 1. 37-42).
- 9. For claim 19, Applicant requires an electrode comprising superalloy having a nickel content of greater than 8% by weight. For claim 21, Applicant requires a titanium content of 0.1-5% by weight.
- 10. Heywood discloses an electrode comprising superalloy (col. 2, 1. 7-16), nickel in an amount of 25 weight percent, and 2 weight percent titanium (col. 3, 1. 12-30).
- 11. Claims 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,844,747 to Jachowski et al. (Jachowski).
- 12. For claim 22, Applicant requires an electrode comprising a thermal-worked steel having a vanadium content of greater than 0.05 weight percent and a chromium content of greater than 1 weight percent. For claim 23, Applicant requires the vanadium content to be 0.07-3.5 percent by weight. For claim 24, Applicant requires the chromium content to be 1-15 percent by weight. For claim 25, Applicant requires tungsten in an amount of 1-10 percent by weight.
- 13. Jachowski discloses an electrode comprising steel, 3.8 weight percent chromium, 1.7 weight percent vanadium, and 6 weight percent tungsten (claim 4).

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14. Claims 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,200,440 B1 to Moran et al. (Moran).

- 15. For claim 26, Applicant requires an electrode comprising stainless steel with a chromium content of greater than 12.5 weight percent. For claim 27, Applicant requires the chromium content to be less than 30 weight percent. For claim 28, Applicant requires nickel in an amount of 2-25 weight percent.
- 16. Moran discloses an electrode comprising stainless steel, 15 weight percent chromium, and 20 weight percent nickel (claim 5).

### Claim Rejections - 35 USC § 103

- 17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 18. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,081,710 to Heywood et al. (Heywood).
- 19. For claim 20, Applicant requires tungsten in an amount of 0.1-15% by weight. Heywood discloses 40 weight percent nickel and anywhere from a trace amount to 20 weight percent tungsten (col. 2, 1. 52-68). Thus, Heywood does not explicitly disclose 0.1-15 weight percent tungsten, but rather, discloses a range that encompasses the range claimed by Applicant. Heywood also discloses, in a separate electrode, the use of tungsten in a weight percentage claimed by Applicant, 12 weight percent (col. 2, 1. 37-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Heywood

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to use tungsten in an amount of 12 weight percent for the electrode containing 40 weight percent nickel because Heywood discloses a range that encompasses 12 weight percent and 12 weight percent is specifically exemplified as a good weight percentage for other similar electrodes in Heywood.

- 20. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,081,710 to Heywood et al. (Heywood) in view of DE 3519163 (DE '163).
- 21. For claim 1, Applicant requires a device comprising a first electrode and a second electrode, each of the electrodes comprised of a superalloy having a cobalt content of greater than 8 weight percent. The device produces a voltage discharge into an aqueous medium when a high electrical voltage is applied to the electrode to create a pressure wave in the aqueous medium. For claim 2, Applicant requires cobalt and nickel in an amount of greater than 12 weight percent. For claim 3, Applicant requires tungsten in an amount of 0.1-15 weight percent. For claim 4, Applicant requires titanium in an amount of 0.1-5 weight percent. For claim 5, Applicant requires a device comprising a first electrode and a second electrode comprises of a superalloy having a nickel content of greater than 8 weight percent. The device produces a voltage discharge into an aqueous medium when a high voltage is applied to the electrode to create a pressure wave. For claim 6, Applicant requires tungsten in an amount of 0.1-15 weight percent. For claim 7, Applicant requires titanium in an amount of 0.1-5 weight percent.
- 22. Heywood is described above, but does not disclose the electrode to be used in a device that creates pressure waves.
- 23. DE '163 discloses that tungsten containing alloy electrodes are beneficial to produce shock waves for medicinal purposes.

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24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Heywood to use the electrode composition in a device that produces pressure waves because of the desire to make pressure waves for medical purposes.

- 25. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,844,747 to Jachowski et al. (Jachowski) in view of DE 3519163 (DE '163).
- 26. For claim 8, Applicant requires a device comprising a first electrode and a second electrode comprises of a thermal-worked steel having a vanadium content of greater than 0.05 weight percent and a chromium content of greater than 1 weight percent. The device produces a voltage discharge into an aqueous medium when a high electrical voltage is applied to the electrodes that create a pressure wave. For claim 9, Applicant requires vanadium in an amount of 0.07-3.5 weight percent. For claim 10, Applicant requires chromium in an amount of 1-15 weight percent. For claim 11, Applicant requires tungsten in an amount of 1-10 weight percent.
- 27. Jachowski is described above, but does not disclose the electrode to be used in a device that creates pressure waves.
- 28. DE '163 discloses that tungsten containing alloy electrodes are beneficial to produce shock waves for medicinal purposes.
- 29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Jachowski to use the electrode composition in a device that produces pressure waves because of the desire to make pressure waves for medical purposes.
- 30. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,200,440 B1 to Moran et al. (Moran) in view of DE 3519163 (DE '163).

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- 31. For claim 12, Applicant requires a device comprising a first electrode and a second electrode comprising stainless steel having a chromium content of greater than 12.5 weight percent. The device produces a voltage discharge into an aqueous medium when a high electrical voltage is applied to the electrode to create a pressure wave. For claim 13, Applicant requires the chromium to be less than 30 weight percent. For claim 14, Applicant requires nickel in an amount of 2-25 weight percent.
- 32. Moran is described above, but does not disclose the electrode to be used in a device that creates pressure waves.
- 33. DE '163 discloses that tungsten containing alloy electrodes are beneficial to produce shock waves for medicinal purposes.
- 34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moran to use the electrode composition in a device that produces pressure waves because of the desire to make pressure waves for medical purposes.

# Claim Objections

35. Claims 4 and 18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4 and 18 have not been further treated on the merits.

### **General Information**

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (571) 272-1700.

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For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Palestine Jenkins at (571) 272-1021.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (571) 272-1300.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H VerSteeg whose telephone number is (571) 272-1348. The examiner can normally be reached on Mon - Thurs (6:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-fifee).

Steven H VerSteeg Primary Examiner Art Unit 1753

shv

March 25, 2004